CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM NO.

FOR
KELLOGG SUPPLY, INC.,
SOIL AMENDMENT PACKAGING FACILITY
SAN JOAQUIN COUNTY

This monitoring and reporting program (MRP) incorporates requirements for monitoring of the contact water storage pond, stormwater pond, fly ash, and groundwater. This MRP is issued pursuant to Water Code Section 13267. The Discharger shall not implement any changes to this MRP unless and until a revised MRP is issued by the Executive Officer.

All samples should be representative of the volume and nature of the discharge. The time, date, and location of each grab sample shall be recorded on the sample chain of custody form. Field test instruments (such as those used to measure pH and dissolved oxygen) may be used provided that:

1. The operator is trained in the proper use of the instrument;
2. The instruments are field calibrated prior to each use;
3. Instruments are serviced and/or calibrated by the manufacturer at the recommended frequency; and
4. Field calibration reports are submitted as described in the "Reporting" section of this MRP.

CONTACT WATER POND MONITORING

Samples shall be collected from an established sampling station located in an area that will provide a sample representative of the water in the contact water pond. Freeboard shall be measured vertically from the surface of the pond water to the lowest elevation of the surrounding berm and shall be measured to the nearest 0.1 foot. Monitoring of the pond shall include, at a minimum, the following:

Constituent	Units	Type of Sample	Sampling Frequency	Reporting Frequency
Freeboard	feet (±0.1)	Measurement	Weekly	Monthly
Odors	--	Observation	Weekly	Monthly
Dissolved Oxygen[1]	mg/L	Grab	Weekly[2]	Monthly
pH[1]	Std. Unit	Grab	Weekly[2]	Monthly
Total Dissolved Solids	mg/L	Grab	Monthly[2,3]	Monthly
BOD_5	mg/L	Grab	Monthly[2]	Monthly
Nitrate (as N)	mg/L	Grab	Monthly[2]	Monthly
Ammonia (as N)	mg/L	Grab	Monthly[2]	Monthly
Arsenic	mg/L	Grab	Monthly[2,4]	Monthly
Molybdenum	mg/L	Grab	Monthly[2,4]	Monthly
Hexavalent Chromium	mg/L	Grab	Monthly[2,4]	Monthly
Liner Inspection	NA	Observation	Annually[5]	Annually

[1] Samples shall be collected at a depth of one foot from each pond in use, opposite the inlet. Samples shall be collected between 0700 and 0900 hours.

[2] Samples shall be collected when water is present. If no water is present, the report shall so state.

[3] If TDS concentration exceeds 750 mg/L, additional samples may be collected within the reporting period. All values shall be presented and averaged in the monitoring report.

[4] Contact water samples for metals analysis shall be filtered with a maximum 0.45-micron filter prior to digestion and analysis.

[5] Liner inspection shall be performed when pond is dry or as close to dry as possible.

STORMWATER POND MONITORING

Samples shall be collected from an established sampling station located in an area that will provide a sample representative of the water in the stormwater pond. Freeboard shall be measured vertically from the surface of the pond water to the lowest elevation of the surrounding berm and shall be measured to the nearest 0.1 foot. Monitoring of the pond shall include, at a minimum, the following:

Constituent	Units	Type of Sample	Sampling Frequency	Reporting Frequency
Freeboard	feet (±0.1)	Measurement	Monthly[1]	Monthly
Odors	--	Observation	Monthly[1]	Monthly
Total Dissolved Solids	mg/L	Grab	Monthly[1]	Monthly

[1] Samples shall be collected when water is present. If no water is present, the report shall so state.

FLY ASH MONITORING

A composite sample shall be collected from fly ash stored at the site. All samples shall be collected prior to mixing with soil products using approved EPA methods and shall be tested by the Waste Extraction Test for soluble constituents. Monitoring shall include, at a minimum, the following:

Constituent	Units	Type of Sample	Sampling Frequency	Reporting Frequency
Arsenic	µg/L	Composite	Monthly	Monthly
Molybdenum	µg/L	Composite	Monthly	Monthly
Hexavalent Chromium	µg/L	Composite	Monthly	Monthly
Title 22 Metals [1]	µg/L	Composite	Annually	Annually

Title 22 Metals shall consist of antimony and/or antimony compounds, arsenic and/or arsenic compounds, asbestos, barium and/or barium compounds (excluding barite), beryllium and/or beryllium compounds, cadmium and/or cadmium compounds, chromium VI compounds, chromium and/or chromium (III) compounds, cobalt and/or cobalt compounds, copper and/or copper compounds, fluoride salts, lead and/or lead compounds, mercury and/or mercury compounds, molybdenum and/or molybdenum compounds, nickel and/or nickel compounds, selenium and/or selenium compounds, silver and/or silver compounds, thallium and/or thallium compounds, vanadium and/or vanadium compounds, and zinc and/or zinc compounds.

GROUNDWATER MONITORING

Prior to construction and/or sampling of any groundwater monitoring wells, the Discharger shall submit plans and specifications to the Board for approval. For the purpose of groundwater monitoring at the site the following wells will be sampled for groundwater elevation and quality: MW-1R, MW-2R, MW-3R, and MW-4; the following wells will be sampled only for groundwater elevation data: P-1, P-2, and P-3.

Once installed, any new wells shall be added to the monitoring network of the existing wells and shall be sampled and analyzed according to the schedule below. All samples shall be collected using approved EPA methods. Water table elevations shall be calculated to determine groundwater gradient and direction of flow.

Prior to sampling, the groundwater elevations shall be measured and the wells shall be purged of at least three well volumes until temperature, pH, and electrical conductivity have stabilized. Depth to groundwater shall be measured to the nearest 0.01 feet. Groundwater monitoring shall include, at a minimum, the following:

Constituent	Units	Type of Sample	Sampling Frequency	Reporting Frequency
Depth to Groundwater	±0.01 feet	Measurement	Quarterly	Quarterly
Groundwater Elevation[1]	±0.01 feet	Calculated	Quarterly	Quarterly
Gradient	feet/foot	Calculated	Quarterly	Quarterly
Gradient Direction	Degrees	Calculated	Quarterly	Quarterly
pH	pH units	Grab	Quarterly	Quarterly
Nitrate as Nitrogen	mg/L	Grab	Quarterly	Quarterly
Total Kjeldahl Nitrogen	mg/L	Grab	Quarterly	Quarterly
Total Dissolved Solids	mg/L	Grab	Quarterly	Quarterly
Total Coliform Organisms	MPN/100 mL	Grab	Quarterly	Quarterly
Standard Minerals[2]	mg/L	Grab	Annual[3]	Annual
Arsenic	mg/L	Grab	Annual[3,4]	Annual
Molybdenum	mg/L	Grab	Annual[3,4]	Annual
Hexavalent Chromium	mg/L	Grab	Annual[3,4]	Annual

[1] Groundwater elevation shall be determined based on depth-to-water measurements from a surveyed measuring point elevation on each well.

[2] Standard Minerals shall include at least the following compounds: boron, calcium, iron, magnesium, manganese, potassium, sodium, chloride, sulfate, total alkalinity (including alkalinity series), and total hardness as $CaCO_3$

[3] Annual sample event shall occur in the fourth quarter of the year.

[4] Groundwater samples for metals analysis shall be filtered with a maximum 0.45-micron filter prior to digestion and analysis

REPORTING

In reporting monitoring data, the Discharger shall arrange the data in tabular form so that the date, sample type (e.g., contact water pond, stormwater pond, or groundwater monitoring well, etc.), and reported analytical result for each sample are readily discernible. The data shall be summarized in such a manner as to clearly illustrate compliance with waste discharge requirements and spatial or temporal trends, as applicable. The results of any monitoring done more frequently than required at the locations specified in the Monitoring and Reporting Program shall be reported in the next scheduled monitoring report.

As required by the California Business and Professions Code Sections 6735, 7835, and 7835.1, all groundwater monitoring reports shall be prepared under the supervision of a registered professional engineer or geologist and signed by the registered professional.

A. Monthly Monitoring Reports

Monthly reports shall be submitted to the Regional Board by the **1st day of the second month** following the end of the reporting period (i.e. the January monthly report is due by 1 March). Monthly reports for the months of March, June, September, and December may be submitted as part of the Quarterly Monitoring Report, if desired. The monthly reports shall include the following:

1. Results of contact water pond, stormwater pond, and fly ash monitoring;

2. A comparison of monitoring data to the discharge specifications and an explanation of any violation of those requirements. Data shall be presented in tabular format;

3. If requested by staff, copies of laboratory analytical report(s);

4. A calibration log verifying calibration of all hand held monitoring instruments and devices used to comply with the prescribed monitoring program;

B. Quarterly Monitoring Reports

The Discharger shall establish a sampling schedule for groundwater monitoring such that samples are obtained approximately every three months. Quarterly monitoring reports shall be submitted to the Regional Board by the **1st day of the second month after the quarter** (i.e. the January-March quarter is due by May 1st) each year. The Quarterly Report shall include the following:

1. Results of groundwater monitoring.

2. A narrative description of all preparatory, monitoring, sampling, and analytical testing activities for the groundwater monitoring. The narrative shall be sufficiently detailed to verify compliance with the WDR, this MRP, and the Standard Provisions and Reporting Requirements. The narrative shall be supported by field logs for each well documenting depth to groundwater; parameters measured before, during, and after purging; method of purging; calculation of casing volume; and total volume of water purged.

3. Calculation of groundwater elevations, an assessment of groundwater flow direction and gradient on the date of measurement, comparison of previous flow direction and gradient data, and discussion of seasonal trends if any.

4. A narrative discussion of the analytical results for all groundwater locations monitored including spatial and temporal tends, with reference to summary data tables, graphs, and appended analytical reports (as applicable).

5. A comparison of monitoring data to the groundwater limitations and an explanation of any violation of those requirements.

6. Summary data tables of historical and current water table elevations and analytical results.

7. A scaled map showing relevant structures and features of the facility, the locations of monitoring wells and any other sampling stations, and groundwater elevation contours referenced to mean sea level datum.

8. Copies of laboratory analytical report(s) for groundwater monitoring.

C. Annual Report

An Annual Report shall be prepared as the Fourth Quarter monitoring report. The Annual Report shall be submitted to the Regional Board by **1 February** each year. In addition to the data normally presented, the Annual Report shall include the following:

1. The contents of the regular monthly and quarterly monitoring report for the last quarter of the year.

2. The annual fly ash and groundwater monitoring.
3. The results of the contact water pond liner inspection.
4. If requested by staff, tabular and graphical summaries of all data collected during the year.
5. An evaluation of the effectiveness of the past year's wastewater (contact water) storage and disposal management in terms of odor control and groundwater protection, including consideration of reapplication management practices (i.e.: salinity buildup in the contact water pond, reapplication of contact water to the product, measures implemented to prevent contamination of stormwater with soil amendments), and groundwater monitoring data.
6. An evaluation of the groundwater quality at the facility. The evaluation shall include presentation and discussion of the analytes collected once per year (standard minerals, arsenic, molybdenum, and hexavalent chromium) as well as all other analytes required by the MRP.
7. A discussion of compliance and corrective actions taken, as well as any planned or proposed actions needed to bring the discharge into compliance with the waste discharge requirements.
8. A discussion of any data gaps and potential deficiencies/redundancies in the monitoring system or reporting program.

A letter transmitting the self-monitoring reports shall accompany each report. Such a letter shall include a discussion of requirement violations found during the reporting period, and actions taken or planned for correcting noted violations, such as operation or facility modifications. If the discharger has previously submitted a report describing corrective actions and/or a time schedule for implementing the corrective actions, reference to the previous correspondence will be satisfactory. The transmittal letter shall contain a statement by the discharger, or the discharger's authorized agent, under penalty of perjury, that to the best of the signer's knowledge the report is true, accurate and complete.

The Discharger shall implement the above monitoring program as of the date of this Order.

Ordered by: _____
PAMELA C. CREEDON, Executive Officer

_____
(Date)

TRO: 5/30/06